IN THE CLAIMS:

Please CANCEL claims 6-7, 9-14, 19-25 and 27-31, without prejudice or disclaimer.

Please ADD claim 32.

Please AMEND the claims in accordance with the following:

1. (Currently Amended) An optical transmission device, comprising:

an optical tunable filter which transmits and extracts signal light with a specific wavelength from signal light multiplexed by a wavelength-division multiplexing (WDM) method and whose wavelength transmission characteristic varies depending on a control signal;

a light transmission filter to which signal light extracted by the optical tunable filter is inputted and which has a wavelength transmission characteristic curve that has its peak in a wavelength located between a first continuous set band and a second continuous set band longer in wavelength than the first set band, and that linearly drops from the peak toward a shorter wavelength side than the first set band and also toward a longer wavelength side than the second set band; ~~and~~

a first optical strength detecting unit detecting strength of light transmitted through said light transmission filter; and

a second optical strength detecting unit detecting the strength of reflected light which is extracted from said light transmission filter when signal light is inputted to said light transmission filter and which has a reflection characteristic, being the reversal of the wavelength transmission characteristic provided to light transmitted through said light transmission filter; and

a control signal generating unit generating a control signal needed to enable the optical tunable filter to extract the signal light with a desired wavelength, based on respective strength detected by the first and second optical strength detecting units~~the light transmitted through the light transmission filter~~.

2. (Currently Amended) The optical transmission device according to claim 1, wherein

the first set band is a wavelength band between 1,525nm and 1,565nm;

the second set band is a wavelength band between 1,570nm and 1,610nm; and

the peak of the wavelength transmission characteristic curve exists between ~~1,565nmm~~ 1,565nm and 1,570nm.

3. (Original) The optical transmission device according to claim 1, wherein

said light transmission filter further has a wavelength transmission characteristic of blocking signals out of a wavelength band in which the multiplexed signal light is inputted to said optical tunable filter.

4. (Currently Amended) The optical transmission device according to claim 1, further comprising:

~~a first optical strength detecting unit detecting the optical strength of light transmitted through said light transmission filter; and~~

a storage unit storing information indicating the wavelength transmission characteristic of said light transmission filter,

wherein

said control signal generating unit generates the control signal, based on both respective optical strength detected by said first and second optical strength detecting ~~unit~~ units ~~when shifting the wavelength transmission characteristic of said optical tunable filter across the entire wavelength band including all segments of the multiplexed signal light~~ and information stored in the storage unit.

5. (Currently Amended) The optical transmission device according to claim 4, further comprising:

a ~~second~~ third optical strength detecting unit detecting strength of light transmitted through said optical tunable filter,

wherein

said control signal generating unit generates the control signal, based on both respective optical strength detected by said first, ~~and~~ second, and third optical strength detecting units ~~when shifting the wavelength transmission characteristic of said optical tunable filter across the entire wavelength band including all segments of the multiplexed signal light~~ and information stored in the storage unit.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The optical transmission device according to claim ~~7~~1, further comprising:

a storage unit storing respective information indicating a characteristic of a difference for

each wavelength between the wavelength transmission characteristic and the reflection characteristic of said light transmission filter,

wherein

said control signal generating unit generates the control signal, based on both a difference in strength between respective optical strength detected by said first and ~~third~~ second optical strength detecting units, and information stored in the storage unit.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) ~~The~~ An optical transmission device, comprising: ~~according to claim 1, wherein~~

an optical tunable filter which transmits and extracts signal light with a specific wavelength from signal light multiplexed by a wavelength-division multiplexing (WDM) method and whose wavelength transmission characteristic varies depending on a control signal;

a light transmission filter to which signal light extracted by the optical tunable filter is inputted and which has a wavelength transmission characteristic curve that has its peak in a wavelength located between a first continuous set band and a second continuous set band longer in wavelength than the first set band, and that linearly drops from the peak toward a shorter wavelength side than the first set band and also toward a longer wavelength side than the second set band; and

a control signal generating unit generating a control signal needed to enable the optical tunable filter to extract the signal light with a desired wavelength, based on the light transmitted through the light transmission filter,

wherein said light transmission filter further has a wavelength transmission characteristic curve that has its bottom in a wavelength located between the first set band and a third continuous set band shorter in wavelength than the first set band and that linearly rises from the bottom toward the peak in a wavelength located between the first and second set bands and also toward the shorter wavelength side than the third set band.

16. (Currently Amended) The optical transmission device according to claim 15, wherein

the first set band is a wavelength band between 1,525nm and 1,565nm;

the second set band is a wavelength band between 1,570nm and 1,610nm; and

the third set band is a wavelength band between 1,480nm and 1, 520nm,

wherein

the peak of the wavelength transmission characteristic curve in a wavelength located between the first and second set bands exists between 1,565nm and 1,570nm; and

the bottom of the wavelength transmission characteristic curve in a wavelength located between the first and third set bands exists between 1,520nm and 1,525nm.

17. (Currently Amended) The optical transmission device according to claim 15, further comprising

a first optical strength detecting unit detecting the optical strength of light transmitted through said light transmission filter; and

a storage unit storing information indicating the wavelength transmission characteristic of said light transmission filter,

wherein said control signal generating unit generates the control signal, based on both optical strength detected by said first optical strength detecting unit ~~when shifting the wavelength transmission characteristic of said optical tunable filter across the entire wavelength band including all segments of the multiplexed signal light~~ and information stored in the storage unit.

18. (Currently Amended) The optical transmission device according to claim 17, further comprising

a second optical strength detecting unit detecting strength of light transmitted through said optical tunable filter,

wherein said control signal generating unit generates the control signal, based on both respective optical strength detected by said first and second optical strength detecting units ~~when shifting the wavelength transmission characteristic of said optical tunable filter across the entire wavelength band including all segments of the multiplexed signal light~~ and information stored in the storage unit.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) A control method of an optical tunable filter, comprising:

detecting strength of light transmitted through a light transmission filter to which signal light, extracted by the optical tunable filter which transmits and extracts signal light with a specific wavelength from signal light multiplexed by a wavelength-division multiplexing (WDM) method and whose wavelength transmission characteristic curve varies depending on a control signal, is inputted and which has a wavelength transmission characteristic curve that has its peak in a wavelength located between a first continuous set band and a second continuous set band longer in wavelength than the first set band and that linearly drops from the peak toward a shorter wavelength side than the first set band and also toward a longer wavelength side than the second set band; ~~and~~

detecting strength of reflected light which is extracted from the light transmission filter when signal light is inputted to the light transmission filter and which has a reflection characteristic, being the reversal of the wavelength transmission characteristic provided to light transmitted through the light transmission filter; and

generating the control signal needed to enable the optical tunable filter to extract signal light with a predetermined wavelength, based on the detected strength of light transmitted through the light transmission filter and the detected strength of reflected light which is extracted from the light transmission filter~~result~~.

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled

31. (Cancelled)

32. (New) A control method of an optical tunable filter, comprising:

detecting light transmitted through a light transmission filter to which signal light,

extracted by the optical tunable filter which transmits and extracts signal light with a specific wavelength from signal light multiplexed by a wavelength-division multiplexing (WDM) method and whose wavelength transmission characteristic curve varies depending on a control signal, is inputted and which has a wavelength transmission characteristic curve that has its peak in a wavelength located between a first continuous set band and a second continuous set band longer in wavelength than the first set band and that linearly drops from the peak toward a shorter wavelength side than the first set band and also toward a longer wavelength side than the second set band; and

generating the control signal needed to enable the optical tunable filter to extract signal light with a predetermined wavelength, based on the detected result,

wherein said light transmission filter further has a wavelength transmission characteristic curve that has its bottom in a wavelength located between the first set band and a third continuous set band shorter in wavelength than the first set band and that linearly rises from the bottom toward the peak in a wavelength located between the first and second set bands and also toward the shorter wavelength side than the third set band.